## **REMARKS**

Claims 57-85 and 150 were pending in the application. New claims 151 - 160 have been added. Claims 57, 82, and 85 have been amended. Claim 81 has been cancelled without prejudice. Thus, upon entry of this amendment claims 57-80, 82 - 85 and 150 - 160 are subject to continued examination. At this time, Applicants respectfully submit that the preponderance of the evidence weighs in favor of patentability and that the claims are in condition for allowance. Accordingly, an action to that effect is respectfully requested.

## Outstanding Art Rejections:

Claims 57-60, 62-67, 69-73 and 75-80 were rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent 4,552,857 to Higgins (Higgins'857) in view of U.S. Patent 5,610,207 to De Simone et al. (De Simone '207) and further in view of U.S. Patent 5,540,968 to Higgins (Higgins '968). Claims 81-85 and 150 were rejected under 35 U.S.C. 103(a) as being obvious over Higgins'857 in view of De Simone '207 and in further view of Higgins '968. Claims 61, 68 and 74 were rejected under 35 U.S.C. 103(a) as being obvious over Higgins'857 in view of De Simone '207 and Higgins '968 and in further view of U.S. Patent 5,616,200 to Hamilton. Thus, all rejections were based in whole or in part on the combination of Higgins'857 in view of De Simone '207 and Higgins '968. Continued rejection on this basis is respectfully traversed and reconsideration is requested.

As best understood by Applicants, De Simone '207 is not directed to carpet tile. Also, it appears that De Simone '207 is <u>not</u> directed to attached cushion broadloom carpet. It appears that De Simone '207 is directed to low density recycled foam pad. Column 2, lines 40 – 45 of De Simone '207 appear to refer to making a tri-laminate pad with a central layer of foam pieces and upper and lower layers of preferably polyurethane foam but which could be natural or synthetic materials, like metal, wood, and woven or unwoven fabrics, eg. "carpet backing" but which are preferably polyurethane foam. Typical carpet backing fabrics are jute or polypropylene. It is believed that De Simone '207 is directed to making pad or underlayment for use with separate, unattached broadloom carpet rather than for making attached cushion

broadloom (roll goods) and is in no way directed to making carpet tile. Applicants believe that the reference to "carpet backing" in De Simone '207 is an example of woven or unwoven fabrics rather than to putting the recycled foam pieces of De Simone '207 on the back of carpet. De Simone '207 does not state "carpet". It states "carpet backing" as an example of fabric. It is known in the rebond pad industry to put a scrim on a rebond foam pad or underlayment. Applicants respectfully believe that De Simone '207 is directed to unattached pad or underlayment rather than to attached cushion broadloom. None of the Examples in De Simone '207 appear to have an upper or lower layer of fabric, much less carpet. The upper and lower layers in the Examples of DeSimone '207 appear to be foam layers. Hence, De Simone '207 is not directed to carpet tile, does not enable rebond foam backed carpet tile, and does not enable rebond foam backed broadloom carpet.

Further, as De Simone '207 is not directed to carpet tile or even attached cushion broadloom carpet, neither De Simone '207 nor Higgins '857 provide the necessary motivation or suggestion for combination or for substituting the recycled foam of De Simone '207 for the foam layer of Higgins '857. As described earlier and as agreed to by the Examiner, it would not have been obvious to substitute rebond foam for the virgin foam in a carpet tile. It would have been even less obvious to substitute a low density rebond foam for virgin foam. Further, it is not obvious to combine pad or underlayment art (De Simone '207) with freelay carpet tile art (Higgins '857) as carpet tiles, especially freelay carpet tiles, are required to be dimensionally stable.

As one of skill in the carpet tile art would readily understand, changes to a dimensionally stable carpet tile structure, even one layer in a stable structure (such as a freelay tile like Higgins '857), are not taken lightly, are viewed with skepticism, and are not done by even experts in the carpet tile art to save money, reduce mass, or the like (see Norton declaration).

Prior to the present invention, carpet tiles were known and rebond foam pads were known but those skilled in the carpet tile art did not use rebond pad in carpet tiles. One of skill in the carpet tile art would not substitute rebond foam pad (low density recycled foam of De Simone

'207) for the foam layer in a carpet tile. One of skill in the carpet tile art would not look to De Simone '207 for motivation or suggestion in modifying the Higgins '857 carpet tile structure.

The Higgins '857 carpet tile effectively has two stabilizing layers (layers 18 and 26). As Higgins '857 is directed to a stabilized, freelay carpet tile, one of skill in the carpet tile art would not remove one of the stabilizing layers. One does not make changes to a stable carpet tile structure in light of the many tile failures over the years, changes in one layer can effect the dimensional stability of the tile (cause cupping and curling, delamination), and the like. Adding a layer or substituting a new material for a layer can have a devastating instantaneous or latent effect on a carpet tile, especially a freelay carpet tile.

Figures 3A and 3B of Higgins '968 do <u>not</u> show a layer of adhesive between reinforcement material 158 and foam 178. Given the teachings of Higgins '968, one would not remove carrier layer 26 of Higgins '857. Figures 3A and 3B of Higgins '968 show a structure without a layer like layer 18 of Higgins 857. Hence, even a hypothetical combination of Higgins '857 and Higgins '968 would not lead one to the claimed invention but would lead one away from it.

As best understood, the conclusion of obviousness reached by the Patent Office is based on the following proposition:

It would have been obvious to one of skill in the art to substitute a rebond foam pad of De Simone '207 for the foam layer of Higgins '857, and to eliminate the carrier layer 26 of Higgins '857, to add a backing material to Higgins '857, and to add an adhesive quick release backing to Higgins '857 in view of Higgins '968.

Applicants respectfully submit that this conclusion is inconsistent with the teachings of the cited art when considered in the context of the accepted wisdom held by those of skill in the art at the time the current application was filed. Thus, the conclusion by the Patent Office appears to <u>not</u> be supported by what the skilled

person would have been motivated to do (or to not do).

As noted at MPEP §2142, to reach a proper determination under 35 U.S.C. 103, the Examiner must step back in time and into the shoes worn by a person of ordinary skill in the art when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination of whether or not the claimed invention as a whole would have been obvious at that time to that person. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. Certainly, Applicants recognize that any judgment of obviousness is in some sense necessarily a reconstruction based on hindsight reasoning. However, such reconstruction may take into account only knowledge that was within the level of ordinary skill in the art at the time the claimed invention was made. See, MPEP §2145(X)(A).

The ultimate determination of patentability must take into account the entire record. The decision is based on the legal standard of "a preponderance of evidence." With regard to rejections under 35 U.S.C. 103, the Examiner must provide evidence which as a whole shows that the legal determination of obviousness is more probable than not. See, MPEP §2142.

Thus, the essential query centers on what a person of skill in the art having the benefit of the cited references but without the benefit of the present application would have considered obvious at the time the invention was made. If the preponderance of the evidence does not weigh in favor of finding that the claimed invention would have been obvious to such a person, then the rejection cannot be maintained.

In his declaration, Mr. Norton notes that in actual practice, despite an interest in reducing material costs for the tile disclosed in the Higgins '857 patent, the density was maintained at about 16 pounds per cubic foot due to concerns over cushion quality and the effect on dimensional stability, long term durability and installation performance. Thus, the Office Action's proposed substitution of the low density foam pad of De Simone '207 for the high density foam layer of Higgins '857 would be inconsistent with actual historical design practices.

Applicants respectfully submit that the prior remarks and disclosures regarding performance of Applicants' carpet tile with rebond foam are sufficient to establish unexpected results and to support patentability in light of the overwhelming evidence weighing against the position of *prima facie* obviousness. In this regard, Applicants note that while an unexpected result may be evidence of nonobviousness it is not a requirement. On this point the Examiner is respectfully referred to the case of *American Hoist & Derrick Company v. Sowa & Sons, Inc.*, 220 USPQ 763, 771 (CAFC, 1984) which notes that a patentable invention may result even without the existence of a new and unexpected result and function.

The Examiner has already acknowledged that the earlier filed declarations establish the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. As noted at MPEP §2145, proceeding contrary to accepted wisdom is evidence of nonobviousness. In addition, Mr. Norton's declaration outlines numerous perceived disadvantages of rebond foam that would weigh against its use in the manner proposed by the Office Action.

In view of the fact that the carpet tile of the Higgins '857 patent is specifically stated to be suitable as a freelay commercial carpet tile, it is respectfully submitted that the evidence of record weighs particularly heavily against the conclusion that the modification proposed by the Office Action would be obvious. In this regard, Applicants note that the data in De Simone '207 actually weighs against the proposed modification since it would be considered to place dimensional stability at risk. Applicants further note that there is no indication in De Simone

'207 that the rebond foam as described can be placed in a carpet tile. The design requirements for carpet tile are particularly rigorous due to concerns over dimensional stability and the like. Thus, it is respectfully submitted that the data in De Simone '207 showing reduced physical performance characteristics actually weigh against the proposed placement of rebond foam in a carpet tile.

In order to reach the invention as claimed, the cited Higgins '857 structure would not only have to be modified to incorporate a rebond foam cushion but would also have to be modified to eliminate one of the stabilizing layers, to add a backing material, to add a quick release backing, and the like. Applicants respectfully submit that such a major redesign weighs even further against the proposed modification and in favor of patentability.

Applicants submit herewith a sample of a commercial carpet tile representative of copying by others. Based on information provided to Applicants, the enclosed sample is of a rebond foam backed carpet tile made and sold in 2004 in Europe by a competitor of Milliken & Company. The competitor who made and sold this tile had for years a different cushion tile product (introduced in about 1995) and recently switched to the rebond foam cushion layer taught by Applicants. Applicants respectively believe this to be sufficient evidence of copying by others which is one of the nonobviousness and patentability factors to be considered.

If the evidence is properly considered in its entirety, Applicants respectfully submit that there can be no reasonable determination that the preponderance of such evidence weighs in favor of obviousness. Unless the preponderance of evidence weighs in favor of a conclusion of obviousness, the claims must be allowed. The evidence of record establishes the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. The evidence also shows that one of skill in the art would have considered the proposed modification of the carpet tile in Higgins '857 to be problematic since the tile being modified is intended to be suitable as a freelay commercial tile. The evidence further establishes that the data in the cited De Simone

'207 reference would have actually provided a disincentive to the proposed modification. In light of such evidence, as well as copying by others, Applicants respectfully submit that the conclusion of obviousness cannot be maintained and that such a conclusion is based on impermissible hindsight and is in contradiction to the controlling standards of patentability.

In light of the above, Applicants respectfully believe the application to be in condition for allowance. An early and favorable action to that effect is earnestly solicited.

## Extension of Time/Authorization to Charge Deposit Account:

To any extent required, a request for an extension of time is hereby made. While no fee is believed to be owed, authorization is provided to deduct any additional fee as may be required for acceptance of this paper from Deposit Account No. 04-0500.

July 14, 2005

Daniel R. Alexander

Respectfully submitted.

Attorney for Applicant(s)
Registration Number 32,604

Telephone: (864) 503-1372 Facsimile: (864) 583-1999

## CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this Information is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 14, 2005, along with a postcard and an attached carpet sample.

Daniel R. Alexander `Attorney for Applicant(s)